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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,310	12/31/2003	David P. Aschenbeck	25320A	1792
22889	7590	03/09/2009	EXAMINER	
OWENS CORNING 2790 COLUMBUS ROAD GRANVILLE, OH 43023				KRUER, KEVIN R
ART UNIT		PAPER NUMBER		
1794				
MAIL DATE		DELIVERY MODE		
03/09/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/749,310	ASCHENBECK ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	KEVIN R. KRUER	1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on Jaunary 7, 2009.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) 1-14 and 19-22 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 15-18 and 23-39 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 12/2003 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ .  | 6) <input type="checkbox"/> Other: _____ .                        |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 15-18 and 23-39 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicant provides no argument regard to where the "above the shingle mat" limitation is supported explicitly or implicitly by the original disclosure. The examiner has text-searched the specification and has found no explicit support for said limitation. Applicant is, therefore, requested to explain where said limitation is explicitly or implicitly supported by the original disclosure.

### ***Specification***

3. The amendment filed 1/7/2009 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: there is no support for any of the disclosure relating to the granules positioned "above the substrate."

Applicant is requested to explain where said limitation is explicitly or implicitly supported by the original disclosure.

Applicant is required to cancel the new matter in the reply to this Office Action.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 15-18 and 23-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ingram (US 3,084,059) in view of Kiik et al (6,585,813).

Ingram teaches an asphalt-covered felt material (col 1, lines 20+) which has aggregate particles applied thereto. Said mat is used as a roofing shingle. Since the particles are applied to the felt, they are understood to be "above the shingle mat." The size distribution of the particles is selected such that less aggregate is needed to cover the asphalt covered felt. The reduction in aggregate leads to a reduction in price (col 6, lines 9+). The aggregate size is selected according to the formula detailed in column 3, line 32+ through column 4, lines 9+. Specifically, the only particles that will be present in the upper layer of asphalt is the largest aggregates with the majority of the aggregate being encapsulated within the asphaltic composition. Said particles are herein

understood to read on the claimed “first portion of granules.”. The examiner notes said aggregates contain no anti-microorganism granules.

Ingram does not teach applying a second portion of aggregates that are anti-microorganism. However, Kiik teaches surface covering asphaltic roofing shingles (abstract) with anti-microbial copper or tin particles (abstract). Said particles are applied such that they may enter part-way into the asphalt (0035), but desirably remain on the surface so that they remain active. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the antimicrobial particles taught in Kiik to the surface of the roofing shingle taught in Ingram. The motivation for doing so would have been to improve the anti-microbial properties of the shingle. Furthermore, it would have been desirable that all of said anti-microbial particles remain on the surface of the shingle such that they were not enveloped. The motivation for doing so would have been so that the particles remain active.

With regards to claims 18, 24, 25, 27, and 28, the examiner notes that said percentage of first and second portions of granules that are enveloped by the asphalt is a method limitation since said limitation does not limit in any way the percentage of granules that are enveloped in the final product. Specifically, the claim allows for an additional portion of granules (not the “first portion” or “second portion”) to be applied to the roofing shingle. Said additional portion could have any percentage of granules enveloped. In the final product, the skilled artisan could not distinguish between the first portion and additional potion of granules.

Additionally, the examiner notes that the 5 component aggregate blend taught in Ingram reads on said claimed range because 33% of said aggregates are category 5 aggregates that will be as large as the asphaltic layer is thick. The 4 component aggregate blend taught in Ingram is also herein understood to read on the claimed percentage because 40% of said aggregates will be category 4 aggregates, thus leaving at least 60% enveloped. The examiner also notes that some of the category 4 aggregates will be enveloped (based upon the aggregate size range and asphaltic layer thickness teachings), thus teaching a layer wherein “about 70%” of said aggregates are enveloped.

With respect to claims 24 and 31, the examiner takes the position any coating will inherently meet said limitation since any amount of first portion of particles will constitute a first and second “predetermined percentage.” Furthermore, said limitation is understood to be a method limitation that does not inherently result in a materially different product or distinguish the claimed product from the product taught in the prior art since it will be impossible to tell in the final product which particles were “first portion” particles and which were “second portion” particles. For the same reasons, the limitations of claim 25 are herein understood to be method limitations.

With regard to claims 34 and 36, the examiner takes the position that the particles taught in the applied references read on the claimed “background granules.” Furthermore, said third portion is understood to be a method limitation because it is not deemed to result in a materially different product. Specifically, it is impossible to tell in the final product which particles were applied in which “portion.” Similarly, the

percentage of claim 25 is understood to be a method limitation because there is no way to tell in the final product which percentage of particles were coated as part of a "first," "second," or "third" portion. Similarly, with regards to the granules staying "substantially positioned within the upper surface portion" or "substantially few of the first portion of granules extend(ing) downward in a downward direction beyond the upper surface portion," the same logic as above applies. Specifically, it is impossible to tell in the final product which particles were applied in which "portion."

With regard to the particle size of claims 23 and 37, the examiner takes the position that it would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the size of said particles in order to get the largest surface area per cost, while maintaining good adhesion and aesthetics. Said particle sizes are known in the art (see US 20050136216A, US 5,356,644, and US 2006/0204719A).

### ***Response to Arguments***

Applicant's arguments have been fully considered but are not persuasive.

#### **Response to Rejection of Independent claims 15, 16, 23, and 39 under 35 U.S.C.**

##### **103(a)**

Applicant argues that the combination of Ingram and Kiik teaches a mixture of rock particles of varying size evenly distributed in layers throughout the asphalt matrix with the antimicrobial particles of Kiik. The examiner respectfully disagrees. Kiik teaches surface covering asphaltic roofing shingles (abstract) with anti-microbial copper

or tin particles (abstract). Thus, the anti-microbial particles would not be evenly distributed in the layers throughout the asphalt matrix.

Applicant further argues that coating a shingle substrate with the roofing material mixture discloses in Ingram would result in a shingle having rock particles both above and below the shingle substrate. Said argument is noted but is not persuasive because counsel's arguments cannot take the place of evidence; Applicant provides no teaching or evidence to support said conclusion. Furthermore, the claim does not exclude the presence of particles below the shingle mat.

**Response to Rejection of Independent Claim 38 under U.S.C. 103(a)**

Applicant argues the particles of Ingram do not read on the claimed "prime" granules. The examiner respectfully disagrees. As noted in the rejection, the largest aggregates were understood to read on the claimed "first portion of granules," including the prime granules of claim 38. Applicant argues said particles are not prime granules but "rather .... a mixture of rock particles and...waste or by product materials, such as ceramic scrap, tile scrap, and furnace slag." Applicant, however, fails to explain why such particles do not read on the claimed "prime" granules. As noted on pages 1 and 2 of the specification, prime granules are those granules that are colored, provide aesthetic benefits or provides a functional purpose. The particles disclosed in Ingram meets all three categories as it is colored and provides the function of weather resistance (col 1, lines 18+). Applicant proposed an alternative definition of "prime" granules as being those coated with a ceramic coating. However, said definition is

counter to the definition in the specification and has not support in the original disclosure.

Applicant further argues that the combination of Ingram and Kiik teaches a mixture of rock particles of varying size evenly distributed in layers throughout the asphalt matrix with the antimicrobial particles of Kiik. The examiner respectfully disagrees. Kiik teaches surface covering asphaltic roofing shingles (abstract) with anti-microbial copper or tin particles (abstract). Thus, the anti-microbial particles would not be evenly distributed in the layers throughout the asphalt matrix.

**Declaration of Mr. Lawrence J. Grubka**

Applicant has also re-filed a declaration by Mr. Grubka. Said declaration Said declaration was previously filed 4/22/08. is not persuasive. With regards to points (1) and (2), said arguments have been addressed above. With regards to (3), a difference in purpose is insufficient to establish patentable subject matter over the prior art. With regards to (4), the granules are not distinguished from the granules of the prior art for the reasons stated above. With regards to (5), said points have been fully addressed in the Advisory Action of 5/13/08 and the Final rejection.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEVIN R. KRUER whose telephone number is (571)272-1510. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kevin R Kruer/  
Primary Examiner, Art Unit 1794